

Atty Dkt. No.:10020122-2
USSN: 10/813,639

AMENDMENTS

RECEIVED
CENTRAL FAX CENTER

In the claims:

NOV 13 2006

Claims 1-29 (Cancelled)

30. (Currently Amended) A method of identifying protein/nucleic acid binding pairs, said method comprising:

(a) contacting a target nucleic acid contacted molecular beacon array comprising a plurality of distinct molecular beacon probes, wherein each distinct probe of said plurality comprises a different probe sequence and all of said probes of said plurality share a common first fluorescent label, with a population of fluorescently labeled proteins to produce a protein bound array, where each member of said population of fluorescently labeled proteins is labeled with a second fluorescent label that makes up a FRET pair with said first fluorescent label; and

(b) detecting any FRET generated signals from said array to identify protein/nucleic acid binding pairs on said array.

31. (Previously Presented) The method according to Claim 30, wherein said method further comprises characterizing the protein of a protein/nucleic acid binding pair identified by said method.

32. (Previously Presented) The method according to Claim 30, wherein said method further comprises characterizing the protein binding sequence of a nucleic acid of a protein/nucleic acid binding pair identified by said method.

33. (Previously Presented) The method according to Claim 30, wherein said array is contacted with two differentially labeled protein populations.

34. (Previously Presented) The method according to Claim 33, wherein said two differentially labeled protein populations make up a test/control pair.

Atty Dkt. No.:10020122-2
USSN: 10/813,639

35. (Previously Presented) The method according to Claim 33, wherein said two differentially labeled protein populations make up a normal/disease pair.

Claims 36-44 (Cancelled)

45. (Previously Presented) The method according to Claim 30, wherein said method further comprises a data transmission step in which a result from a reading of the array is transmitted from a first location to a second location.

46. (Previously Presented) The method according to Claim 45, wherein said second location is a remote location.

Claims 47-51 (Cancelled).

52. (Currently Amended) A method of identifying protein/nucleic acid binding pairs, said method comprising:

(a) contacting a target nucleic acid contacted molecular beacon array comprising a plurality of distinct molecular beacon probes, wherein each distinct probe of said plurality comprises a different probe sequence and all of said probes of said plurality share a common first fluorescent label, with at least one fluorescently labeled protein to produce a protein bound array, where said at least one fluorescently labeled protein is labeled with a second fluorescent label that makes up a FRET pair with said first fluorescent label; and

(b) detecting any FRET generated signals from said array to identify protein/nucleic acid binding pairs on said array.

53. (Cancelled)